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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/787,101

02/27/2004

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EXAMINER

ABDULSELAM, ABBAS I

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

10/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/787,101	<b>Applicant(s)</b> UEHARA ET AL.	
	<b>Examiner</b> ABBAS I. ABDULSELAM	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-11, 13-15, 17-26, 28-30, 33-35 and 38-54 is/are allowed.
- 6) ☒ Claim(s) 1, 12, 16, 32, 36 and 37 is/are rejected.
- 7) ☒ Claim(s) 2-6, 27 and 31 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to a communication filed on 07/03/08. Claims 1-54 are pending.

#### ***Response to Arguments***

2. Applicant's arguments filed on 07/03/2008 have been fully considered but they are not persuasive.

Applicant argues that the cited reference, Conner et al. (USPN 7113231) does not teach MxN number of sub-pixels included in a display pixel which is formed within a square area and a lenticular lens for distributing light rays from the sub-pixels individually to N number of view points. The examiner disagrees with the applicant's arguments.

As shown in the art rejection below, Conner teaches a dot sequential color display system as shown in Fig. 1 including a projection lens assembly 26 projecting the overlapping images of color component sub-pixels or dots onto a display screen 28 that is viewed by one or more observers. Note that the subpixels can be arranged in rectangular fashion as evidenced in Fig. 23 in which full-color triplet of sub-pixels 302 are arranged. Also see Fig. 16 in which sub-pixels A, D, B, and C are configured and are arranged in a square fashion.

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Conner's color component sub-pixels (which could be configured as a square) with respect to the desired number of viewers, because the number of viewers/observers can be more than one and hence can vary as taught by Conner.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 12, 16, 32 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Conner et al. (USPN 7113231).

Regarding claims 1, 12, 16, 32, 36-37, Conner et al. (USPN 7113231) teaches a dot sequential color display system as shown in Fig. 1 including a projection lens assembly 26 projecting the overlapping images of color component sub-pixels or dots onto a display screen 28 that is viewed by one or more observers. As shown in Fig. 1, Cornett also teaches the use of pixelated electronic display (e.g., a liquid crystal display) (20). Conner teaches as shown in Fig. 5 a display device 58 illustrating that at each of times  $t$ , pixel columns  $x$  and  $x+3$  receive blue color component information, pixel columns  $x+1$  and  $x+4$  of display device 58 receive green color component information, and pixel columns  $x+2$  and  $x+5$  of display device 58 receive red color component information (col. 7, lines 26-34).

Conner does not specifically teach  $M \times N$  number of sub-pixels included in a display pixel which is formed within a square area and a lenticular lens for distributing light rays from the sub-pixels individually to  $N$  number of view points.

However, Conner teaches a dot sequential color display system as shown in Fig. 1 including a projection lens assembly 26 projecting the overlapping images of color component

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sub-pixels or dots onto a display screen 28 that is viewed by one or more observers. Note that the subpixels can be arranged in rectangular fashion as evidenced in Fig. 23 in which full-color triplet of sub-pixels 302 are arranged. Also see Fig. 16 in which sub-pixels A, D, B, and C are configured and are arranged in a square fashion.

Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Conner's color component sub-pixels (which could be configured as a square) with respect to the desired number of viewers, because the number of viewers/observers can be more than one and hence can vary as taught by Conner.

#### *Allowable Subject Matter*

4. Claims 2-6, 27 and 31 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 7-11, 13-15, 17-26, 28-30, 33-35 and 38-54 are allowed.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABBAS I. ABDULSELAM whose telephone number is (571)272-7685. The examiner can normally be reached on Monday through Friday from 9:00 A.M. to 5:30 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

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Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Abbas I Abdulsalam/

Primary Examiner, Art Unit 2629

September 30, 2008